REMARKS

The January 23, 2008 Office Action has been carefully reviewed and considered. Claims 1-44 are pending in the present application. Of these, claims 1-12 and 24-35 were previously elected with traverse in response to a prior restriction / election requirement. Claims 1-12 and 24-35 stand rejected. The rejection of all pending independent claims as being anticipated is fundamentally flawed for several reasons as explained below. As such, all claim rejections must be overturned.

35 U.S.C. §102(e) Claim Rejections

Claims 1-7, 9-10, 24-30 and 32-33 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication No. 2004/0160922 (Nanda). Independent claims 1 and 24 are directed to reverse link rate control by a mobile station. Particularly, the mobile station generates reverse link rate requests based in part on reverse link throughput as monitored by the mobile station. Nanda does not disclose a mobile station that monitors reverse link throughput. Nanda also fails to disclose a mobile station that generates reverse link rate requests based in part on reverse link throughput. For at least these reasons, the rejection of claims 1-7, 9-10, 24-30 and 32-33 must be overturned.

Applicant does not dispute that Nanda discloses a mobile station that computes a reverse link data rate requirement. However, Nanda's required reverse link data rate is generated in a very dissimilar way compared to the present claimed invention. For example, steps 405, 406 and 407 of Figure 4 in Nanda illustrate how the required reverse link data rate is determined. Nanda explicitly states that the data rate is determined based on the transmission deadline assigned to an output queue (see step 405 and the first sentence of paragraph [0028] in Nanda). The second sentence of paragraph [0027] in Nanda states that the output queue transmission deadline is determined "based on the packet arrival time and the maximum permitted delay for that service (or flow)."

Packet arrival time cannot be confused with reverse link throughput, and neither can the maximum permitted delay parameter. Packet arrival time is the point in time at which a packet is received by a device whereas reverse link throughput is the amount of data transferred from a mobile user to a base station divided by the time taken to transfer it. Clearly, these two terms mean something very different. The maximum permitted delay referred to in Nanda and relied on by the Examiner in rejecting the claims is a QoS (quality of service) parameter negotiated by a base station (see paragraph [0025] in Nanda). In fact, the last sentence of paragraph [0025] explicitly states that a QoS guarantee like maximum permitted delay is "necessarily probabilistic," meaning that it is not something that is actually measured or monitored.

Thus, Nanda's required reverse link data rate is determined based on packet arrival time and a QoS parameter that is probabilistic in nature. Neither the packet arrival time nor the maximum permitted delay QoS parameter is the same as reverse link throughput. In support, the Examiner is kindly directed to the Office Action Response filed November 6, 2007 where the claim term "reverse link throughput" was construed by Applicant to mean "the amount of data transferred from a mobile user to a base station divided by the time taken to transfer it," typically expressed in bits or bytes per second. The Patent Office apparently agrees with Applicant's proffered claim construction because it is not disputed, rebutted or otherwise addressed in the most recent Office Action.

It logically follows that the Patent Office would also agree that negotiating a QoS parameter like Nanda's maximum permitted delay is not the same as monitoring reverse link throughput, i.e., monitoring the amount of data transferred from a mobile user to a base station. To make this distinction even more explicit, the claims are amended herein so that ongoing reverse link throughput is the thing being monitored. Negotiating QoS parameters like maximum permitted delay as is done in Nanda is not equivalent in any meaningful way to monitoring ongoing reverse link throughput.

The fundamental flaws in the §102(e) rejections of independent claims 1 and 24 become readily apparent in view of the above arguments. First, Nanda does not monitor ongoing reverse link throughput as recited in the pending independent claims. It logically follows that Nanda does not teach or suggest generating reverse link rate requests based in part on ongoing reverse link throughput. Instead, Nanda determines a required reverse link data rate based on a transmission queue deadline. The transmission queue deadline is in turn based on packet arrival time and a maximum permitted delay QoS parameter. Neither of these parameters involves monitoring ongoing reverse link throughput as explained above. In fact, Nanda itself explicitly states that the maximum permitted delay QoS parameter is "necessarily probabilistic", and thus cannot involve monitoring the amount of data transferred from a mobile user to a base station.

Applicant further wishes to address the Examiner's response at pages 14 and 15 of the Office Action. Most of the response is essentially a carbon-copy of the claim rejection reasoning recited earlier in the Office Action. In fact, the Examiner appears to reject the claims based on the exact same line of reasoning enumerated in the original Office Action of August 7, 2007. However, the Examiner does state for the first time that Nanda discloses determining the required data rate based on queuing delays computed using an "uplink data rate" and queue sizes. This statement indicates a shift in the Patent Office's claim rejection logic. In support of this new position, the Examiner cites several sections in Nanda. Applicant has carefully reviewed the cited sections and respectfully disagrees that Nanda's required reverse link data rate is determined based on queuing delays computed using an uplink data rate and queue sizes. Instead, Nanda's required data rate is determined based on packet arrival time and a maximum permitted delay QoS parameter, neither of which are the same as monitoring ongoing reverse link throughput as explained in detail above.

Even if the required reverse link data rate in Nanda was determined based in part on an uplink data rate, a point Applicant does not concede, the uplink data rate is defined as a QoS parameter. In fact, Nanda refers to the data rate QoS variable as being "necessarily probabilistic" (see the last sentence of paragraph [0025] in Nanda and the corresponding discussion above). Thus, the uplink data rate QoS parameter is not the same thing as ongoing reverse link throughput. Instead, Nanda's uplink data rate QoS parameter represents a desired or "acceptable" rate negotiated by the base station in advance of data communication, and not data transferred from a mobile user to a base station (see paragraph [0025] in Nanda). Because Nanda fails to teach several of the independent claim features, all §102(e) claim rejections must be withdrawn.

35 U.S.C. §103(a) Claim Rejections

Claims 11, 12, 34 and 35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nanda in view of U.S. Patent Publication No. 2003/0219037 (Toskala). Claims 8 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nanda in view of U.S. Patent No. 6,442,139 (Hosein). Claims 8, 11, 12, 31, 34 and 35 are patentable at least to the same extent as their respective independent claims. Thus, the §103(a) claim rejections must be overturned for at least this reason. Applicant wishes to resolve the glaring defects in the independent claim rejections before addressing the dependent claim rejections. Applicant reserves the right to rebut any dependent claim rejections at the appropriate time if an agreement cannot be reached as to the patentability of the base independent claims.

Conclusion

Applicants respectfully submit that all claims 1-12 and 24-35 are patentable over the cited references in view of the remarks and amendments made above. Action to that affect is

respectfully requested. The Examiner is encouraged to contact Applicants' attorney at (919)-854-1844 if any outstanding matters can be readily addressed by a phone call.

Respectfully submitted,

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